

METHOD AND SCALABLE ARCHITECTURE FOR PARALLEL
CALCULATION OF THE DCT OF BLOCKS OF PIXELS OF DIFFERENT
SIZES AND COMPRESSION THROUGH FRACTAL CODING

Abstract of the Disclosure

A method of calculating the discrete cosine transform (DCT) of blocks of pixels of a picture includes the steps of defining first subdivision blocks called range
5 blocks, having a fractional and scaleable size $N/2^i * N/2^i$, where i is an integer number, with respect to a maximum pre-defined size of $N*N$ pixels of blocks of division of the picture, referred to as domain blocks, shiftable by
10 intervals of $N/2^i$ pixels. The method also includes the step of calculating the DCT on 2^i range blocks of a subdivision of a domain block of $N*N$ pixels of the picture, in parallel.